



## **HRS4R**

# **HR strategy for research at the Université de Lorraine**

Procedures for deploying the principles laid down in the European Charter for Researchers  
and the Code of Conduct for the Recruitment of Researchers

VERSION 0

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## 1 CONTEXT

The Université de Lorraine (UL) was created on 1 January 2012, the result of the merger of the four founding Universities, Institut National Polytechnique de Lorraine -INPL- (engineering schools, engineering sciences), Université Henri Poincaré -UHP- (Sciences and technologies, Healthcare), Université Nancy 2 (Human and social Sciences, Law, Economics and Management) and Université Paul Verlaine de Metz -UPVM- (Sciences and Technologies, Law, Economics and Management, Human and social Sciences). UL is thus a multidisciplinary

university where all disciplines can be found except for astronomy, but it does include theological disciplines.

In 2006, INPL, UHP and UPVM's respective Boards of Directors decided to adopt the principles and the charter, without any plans of action being adopted at the time given the preparations and merger of the universities in the Lorraine region.

The European Human Resources Strategy for Researchers (HRS4R) aims at improving practices at organisations and institutions whose mission is notably to perform research, recruit researchers and provide them with a good working environment. For the Université de Lorraine, obtaining the "HR" label is an asset for its appeal, its visibility and the quality of its human resources policy.

In 2015, the Université de Lorraine therefore implemented the HR label project and, above and beyond labelling, sought to implement the principles in the Code and the Charter in terms of human resources strategy in an approach focusing on quality and continuous improvement. After presenting the Code and the Charter to the various University authorities (Training and Research Councils, Institutional Technical Committee, Committee for Health, Safety and Working Conditions), the Board of Directors unanimously decided to adopt the code and the European Charter at its meeting of 16 December 2015. UL informed the European Commission in a letter dated 18 December 2015 of its desire to concretely apply the principles contained in these two documents.

The Université de Lorraine's objectives are to increase their appeal, improve understanding and facilitate obtaining European recognition and financing (H2020, ERC, etc.); there is a desire to implement incentives for its researchers with the recognition of career mobility and to facilitate openness to the jobs market, developing the principles of non-discrimination – notably gender equality – and providing a work environment conducive to carrying out research activities.

## **2 PRESENTATION OF THE UNIVERSITE DE LORRAINE**

### **2.1 Université de Lorraine:**

The Université de Lorraine's status is unique in France and is mainly the results of incorporating various French university training processes into one single institution, as well as a set-up that is not centred on a single large metropolitan area, but rather fits into the Lorraine metropolitan system, with two main sites in Nancy and Metz.

With over 70% of its students from Lorraine and nearly 30% from the Grand Est region, the Université de Lorraine brings together national research organisations with its partners and outside schools for 98% of all public research in Lorraine, the second largest University in France in terms of the number of students, after Aix Marseille Université. It has burst onto the ESR (Higher Education and Research) scene as a key player. This regional and national situation is part of the institution's strategy of positioning itself amongst France's major Universities. On the regional level, the Université de Lorraine oversees the Université de la Grande Région (UniGR), which groups together 6 Universities with the three countries bordering Lorraine.

The Université de Lorraine has enhanced its reputation and its international recognition and now holds approximately the 250<sup>th</sup> place in the Shanghai Ranking and is one of the 200 best

universities in the world for mathematics and sciences for engineers (ranking 7<sup>th</sup> nationally). All sectors contribute to the University's reputation, as can be seen in the international recognition of its laboratories, teams and individuals in every Scientific Centre at the University. For training, its international reputation comes partially from its structural measures at the intersection of training and research (specialised international master's degrees), but also targeted international cooperation actions, projecting the quality of our training programmes beyond our borders (off-campus and partnership diplomas, project management assistance for setting up training programmes and schools abroad). This international reputation is no doubt one factor explaining the large share of foreign colleagues recruited at our institution. Above and beyond the merger's simple additive effect, the Université de Lorraine's international credibility has increased amongst its foreign academic and socioeconomic partners, as can notably be seen in its partner status in the European Institute of Innovation and Technology's "EIT Raw Materials" KIC and as the operator of one of its co-location centres. On the national level, the Université de Lorraine is the second largest University in terms of the number of students and the leading institution for the number of engineering degrees awarded. The Lorraine Université d'Excellence label granted in January 2016 as part of the PIA's centres excellence (ISITE) has given the University major, added recognition that goes far beyond France's borders.

The Université de Lorraine is one of the few European Universities that is both multidisciplinary and technological (in the international sense of the term). The comprehensiveness of the French educational processes on the one hand (university institutes of technology, traditional disciplinary training units, specialised institutes, engineering schools, healthcare training units) and, on the other, an excellent level of disciplinary research combined with recognised engineering capacities in several fields, lend a distinctive profile to the Université de Lorraine. Another distinctive asset no doubt lies in the central geographical position of the new Grand Est region, both in Europe and along the borders with three countries.

The Université de Lorraine needs to make this multifaceted identity a strength. This will require strengthening those disciplines that bring appeal and reputation to a wide range of disciplines. On this basis, which is the underpinnings of all great Universities, the Université de Lorraine seeks to take up the major societal challenges of our day through a combination of interdisciplinary approach, its engineering capacity, and its openness to the world and society. Energy transition, the digital revolution, ecology and interculturality are some of the major challenges facing the 21<sup>st</sup> century and toward which the University seeks to make a significant contribution, as proposed in the Lorraine Université d'Excellence programme. This is the spirit in which student training should evolve through changes in pedagogical practices and greater openness toward the wider world and business. While reasserting a demanding attitude in terms of disciplines, students must be able to reorient their studies – more so than today – between educational processes, easily acquiring additional skills, and living entrepreneurial and cultural experiences in keeping with their personal projects.

## **2.2 Research at the Université de Lorraine:**

The Université de Lorraine has structured its research system's organisation around a Scientific Council and ten Scientific Centres, 3 centres in the human and social sciences sector, 2 centres in the life sciences and environment sector, and 5 centres in the sciences and technologies sector. The 61 Research Units and the 8 federated structures were unequivocally divided between the 10 scientific centres. This organisation, initiated during

the merger of the 4 Universités de Lorraine in 2012, has made a place for itself and has enabled our University to develop an integrated, responsive framework. Doctoral training is given in a doctoral college structure, the Lorraine College of Doctoral Studies (CLED). Lastly, research promotion has been reorganised to ensure an interface with the Société d'Accélération et de Transfert Grand Est (SATT GE).

Above and beyond the University's internal structure, the research strategy at the Université de Lorraine is integrated into the regional strategy shared with scientific partners in Lorraine with joint supervision of the 28 research units and 7 federated structures, and which come together in the Lorrain Scientific Coordination and Orientation Committee (CCOSL: UL + CNRS, Inra, Inria, Inserm and CHRU). UL shares ambitions with the CCOSL (Lorraine Scientific Coordination and Orientation Committee) for major regional and national projects to organise the regional research area, propose joint responses to calls for projects and financing and to ensure positioning for the arrival of new players or new organisations in the region, such as the creation of the Grand Est region (Alsace-Champagne-Ardenne-Lorraine). The Lorraine Université d'Excellence (LUE) ISITE is the result of this shared strategy, showcasing the Lorraine site's special position in engineering research and training.

### **2.3 Researchers at the Université de Lorraine**

At Université de Lorraine, researchers belong to two main categories: "tenured" researchers (permanent civil servant status), such as Lecturers (Maîtres de Conférences – MC), Professors (Professeur – Pr) or Research Engineers (Ingénieurs de recherche – IR), and contractual positions (most of them temporary positions, in some cases permanent positions), such as contractual PhD students (Doc), post-docs or researchers paid under a contract. The permanent tenured positions are recruited through the usual procedures for public service in France. The Doctoral positions at Université de Lorraine have a doctoral contract (national regulation, decree of 29/08/2016) and are recruited by the 8 doctoral schools, following their regulations. The other positions are recruited in adequacy with the requirement of the project for which they are hired and of the financial body funding their salary. All PhD students in science, technology or health at Université de Lorraine have a minimum funding (doctoral contract, health professional, stipend from foreign country...) covering at least living expenses. As is the case more generally in France, all PhD students in humanities and social sciences do not have such a funding – in many cases, the PhD is a long term personal project.

Each researcher at Université de Lorraine does his/her research work in a research unit accredited by the Ministry for Higher Education and Research, and evaluated every 5<sup>th</sup> year. Lecturer and Professors can freely choose the research unit in which they do their research work (national regulation), provided there is a good adequacy between the person's personal research project and that of the research unit. The assignment to research units covers the five-year period between two evaluations of the university's research units, which is also the period for the contract between the University and the Ministry. In exceptional cases, under the supervision of the Scientific Council, individual researchers can be allowed to move to another research unit during that contract. In the research unit, the researchers have access to the necessary resources for their work (experimental labs, instrumentation, documentation, digital tools...) and can submit proposals for funding to local, national, or international calls, under the auspices of the director of the research unit. They contribute to the institutional life of the research unit and of the university, through election or

nomination to various councils, committees, and working groups. They can also be members of national bodies (CNESER, CNU, CoNRS, ...)

The researchers have access to local and national means for training and promotion: doctoral training and occupational integration for DOCs, professional training, sabbatical leaves (CRCT) and secondment to national research organizations such as CNRS, Inra or Inria. They can get an extra gratification for the excellence of their research and of their doctoral supervision (national regulation + local rules set by scientific council). They are also invited to apply for promotions, either through the national channel (through CNU, with national regulations), or through the local channel (regulations set by the University Governing Board). At the end of their career, after retirement, MCs and PRs can continue to do research in their research unit if they apply for the emeritus status (national regulation and local modalities set by Scientific Council and by the Governing Board of the university).

#### **2.4 The Human Resources vision at the Université de Lorraine:**

As a mainly human institution, the University gives priority to its goal of providing a good working environment and professional and study conditions conducive to its staff and students' growth. Whether concerning the workplace or living spaces, processes and procedures applying to individuals or the definition of missions and obligations, the University must be demanding for its staff and its users. This continuous improvement approach is already applied to research and training, but must be expanded to bring the University up to the highest international standards. This will actively contribute to the University's recognition and to increasing its appeal to attract the best staff and students.

## UNIVERSITY FACTS AND FIGURES

*(key figures for 2016 as of 1 January)*

**3,845 researchers, research professors and teachers**

**Including**

Researchers: 729

298 women and 431 men

279 foreign researchers

Teachers: 666

300 women and 366 men

Research Professors and lecturers: 2,450

823 women and 1,627 men

**2,993 BIATSS staff (library, engineers, administration, technicians, health services)**

**56,786 Students in initial training, in 43 training components (excluding doctoral students)**

**8,913 students in continuing education, including 771 professionalisation contracts**

**8,455 international students**

**61 research units**

**1,809 doctoral students enrolled**

990 men

819 women

91 nationalities

846 foreign doctoral students

1,333 receive dedicated funding for their theses

567 doctoral students paid by the University

310 from the State budget

62 from the University budget

i.e. 372 doctoral students covered by doctoral contracts

766 paid outside UL

276 doctoral students with salaried employment other than the thesis,

200 doctoral students preparing their thesis without financing

8 doctoral schools

364 theses defended in 2015

43 accreditations to supervise research

Institutional budget: €582 million

Allocation for operating expenses: €465 million

449 new own resource contracts signed for €5.204 million in turnover

155 patent families

57 brands

96 software programmes

### 3 HUMAN RESOURCES STRATEGY

The institution's strategic project announces a Human Resources policy to promote skills and ensure the quality of working conditions. This strategic orientation focuses on the following objectives:

- Building the future on the quality of our human potential, implementing resources and actions to attract high-quality staff in the future.
- Making the working conditions at the University a factor of efficiency and well-being.
- Encouraging initiative, empowering the stakeholders and recognising their collective and individual investment.
- Shaping the University's identity based on a shared culture and values – those of real social responsibility.
- Making the living conditions at UL and in Lorraine a factor of attractiveness.

Since 2012, all of these objectives have been more or less achieved in the different fields, and it should be pointed out that everyone's work has contributed to these results across the board between policy desires and between the Human Resources Department, the Health Safety and Environment Department, and the Academic Life and Culture Department. As part of its employer social responsibility, the Université de Lorraine (UL) was organised in 2012 to meet the various needs of its staff and to fulfil its obligations. For all the issues in question, three operational departments were created – the Human Resources Department (DRH), the Health, Safety and Environment Department (DHSE) and the Academic Life and Culture Department (DVUC). For the staff, the DVUC offers actions whose results are aimed at improving workplace well-being; the DRH and DHSE have objectives for social dialogue and quality professional life.

This recent period can clearly be divided into two periods:

- The merger period (2012-2014), when it was a question of building the Université de Lorraine, organising it with clearly defined policy objectives and implementing joint, shared procedures and processes. This period was dedicated to the social dialogue needed to harmonise previous practices in terms of human resources at the 4 founding institutions: working hours, statutory and individual compensation plans, rules for managing contract staff, etc.
- Since 2015, with most of the work related to the merger having been completed, it became possible to set ambitious targets, notably put forward in the institutional contract, such as living conditions in the workplace and the European strategy label for human resources.

All the work and projects were studied, discussed and decided upon in accordance with French law. The law lays down rules for complying with recruitment procedures and the legal status of civil servant staff. For contract staff, the Université de Lorraine has adopted rules ensuring that they are treated in practically the same way as the civil servants, a situation that is nearly unique in France and is helpful when the need arises to recruit high-level researchers with attractive conditions.

Our work now notably focuses on:

- Pursuing work on the quality of workplace life: providing support for staff in their personal career projects, psychosocial risk prevention and equality-discrimination-diversity.

- Doctoral students: new regulations (decree dated 08-2016), but also weakness observed at UL demonstrate the need to implement virtuous practices for doctorates at UL in terms of attractiveness, reception and treatment. The procedures proposed under the LUE (ISITE) programme must be applied immediately.

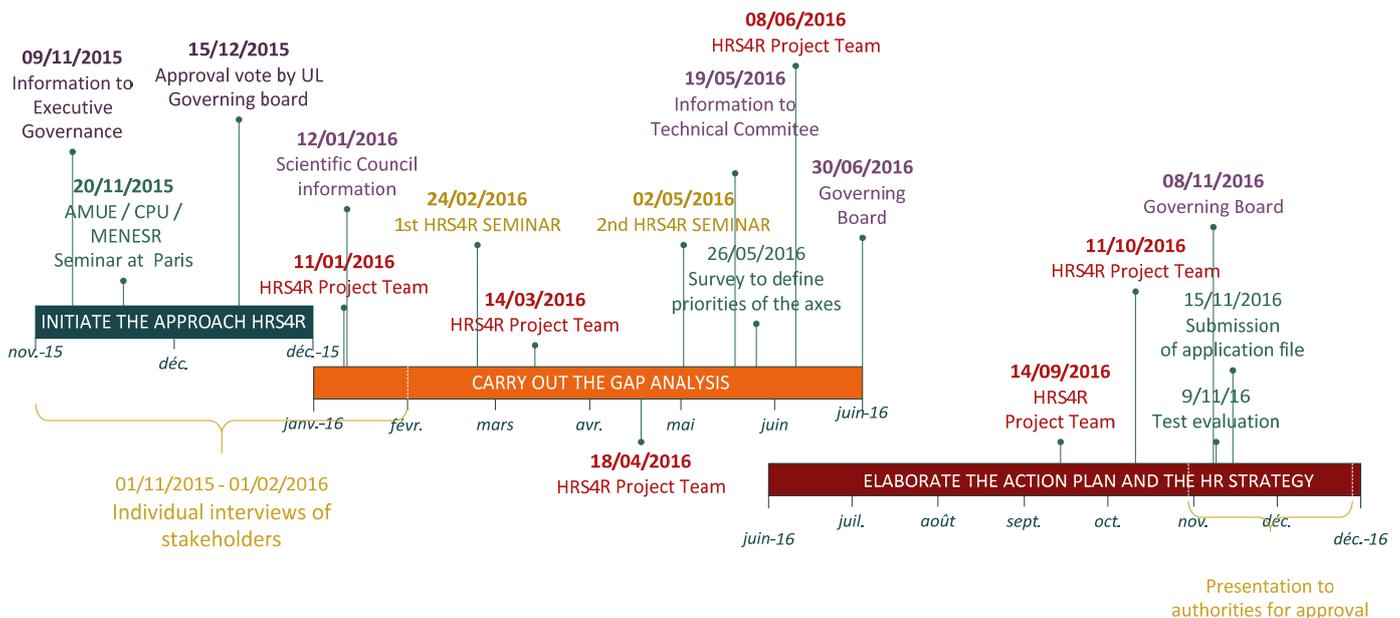
## 4 IMPLEMENTATION METHODOLOGY

The institution's determined action was backed up by a tool provided by the European Commission: the Human Resources Strategy for Researchers (HRS4R), comprising 5 stages and widely supported by the CPU (Conference of University Presidents), AMUE (Agency for Pooling University and Institutional Resources) and MENESR (Ministry of National Education, Higher Education and Research).

This eminently cross-disciplinary project required setting up a Steering Committee (COPIL) bringing together the University's 3 main functions at the heart of the system (Human Resources, Research, and International and European Affairs). The HRS4R COPIL at the Université de Lorraine comprises three faculty members, who are Vice Presidents in charge of the aforementioned functions, as well as the 3 directors in charge of these same fields: director of Human Resources, director of Research office, director of International and European office. In addition, representative of the Steering and Quality Support Delegation (DAPEQ) and a project leader were included.

This project was carried out in 5 main stages:

- Stage 1: Performing a self-assessment (gap analysis): providing an in-house analysis of the practices implemented to identify the institution's strengths and weaknesses, using individual interviews, seminars and a survey.
- Stage 2: Setting up the plan of action in keeping with the methods used in stage 1.
- Stage 3: Application for recognition and obtaining the label.
- Stage 4: Self-assessment at two years.
- Stage 5: External assessment at four years.



The process implemented during stages 1 to 3 is presented below.

#### 4.1 In-house analysis of practices and performing a self-assessment

This analysis is carried out on current practices at the institution for the 40 points in the Charter and the European Code for Researchers, with the involvement of key stakeholders in research, using a gap analysis. A veritable self-assessment, this tool enables the institution to identify, at the earliest stage possible, its strengths – to take advantage of them – and its weaknesses in view of improving practices. This initial assessment was performed by the labelling project manager using individual interviews with the stakeholders, policy and administrative officials holding positions of responsibility in the fields of Human Resources, Research and Valorisation, International Relations and Partnerships, but also Academic Life and Health and Safety.

#### 4.2 Involvement by the academic community

From the project's outset, there has been a desire to get all the beneficiaries of the principles laid down in the Charter and the Code involved at an early stage, as soon as possible, in other words research professors, post-doctoral students and doctoral students. Technical staff also took part in this work.

That is why, when the project was launched, a presentation of the Charter and the principles was successively given to the Policy Team (09/10/2015), the Scientific Council (01/12/2015) and, lastly, the Board of Directors (16/12/2015). All the information provided was made available to everyone at the *Espace Numérique de Travail* (Digital Work Space).

Two seminars were organised. The first (24 February 2016) was a one-day seminar that began with a presentation of the stakes and the labelling context for the Charter and the Code. A second section was dedicated to analysing the self-assessment undertaken and determining strengths and weaknesses in order to round out the gap analysis. The 40 principles in the Code and the Charter were examined. Discussions were carried out in three workshops hosted by the 3 Vice Presidents, respectively, to better pinpoint the participants' main concerns. The brainstorming session was held using the same work grid, leading to a

summary that was distributed to all the participants. The second seminar was held on 2 May 2016. It consisted in a work period dedicated to rounding out and validating the summary from the first seminar. The goal was to begin to outline a plan of action before its finalisation.

The COPIL decided to issue a wide-ranging invitation to these seminars. Thus, 479 people were invited, including the members of the Board of Directors, members of the College of Doctoral Schools, the members of the Management Team, Laboratory Directors, Collegium Directors, the Directors of the Scientific Centres, administrative managers from the laboratories and the training units and the Directors of the Operational Departments, who were asked to pass the information on to their colleagues so as to reach all the personnel. During the workshops, thirty-six participants (17 Faculty member, 3 Researcher, 5 Ph D Student, 11 Administrative staff) were able to propose, discuss and prioritise the work orientations to be included in the plan of action. The same people were present at the second seminar, thus ensuring the continuity of the discussions undertaken.

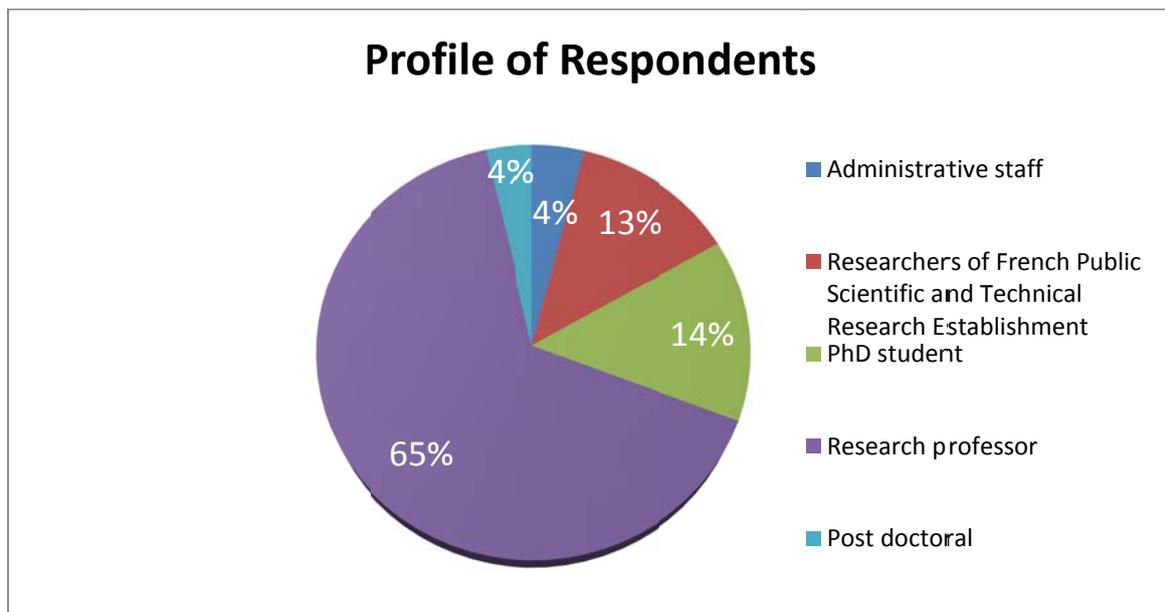
### **4.3 Drafting the plan of action**

The avenues for reflection defined during the seminars were taken up by the members of the COPIL. Six work orientations were defined:

- Status of doctoral and post-doctoral students,
- Researchers' recruitment and careers,
- Quality of life in the workplace,
- Mobility, giving the University an international dimension,
- Professional ethics, integrity and values,
- Access to and diffusion of knowledge.

The COPIL's desire was to gather as many opinions as possible from people and to get the academic community widely involved. In addition to the seminars, the decision was taken to carry out a survey to submit the orientations and avenues for improvement to everyone and to ask them for their opinions on priorities for the actions.

Distribution was undertaken with the laboratory directors, who were asked to direct their collaborators to the link for gathering the opinions of the population being surveyed, broken down as follows for the 276 responses gathered.



*Cf : Result of the survey, Annex 1*

Once all this work was completed, the Steering Committee (COPIL) was able to draw up this summary review memo and to finalise the plan of action for submission to UL's governing bodies.

## 5 STRENGTHS, AVENUES FOR IMPROVEMENT AND PLAN OF ACTION

### 5.1 Strengths

Several of the principles laid down in the Charter and the Code have already given rise to concrete actions implemented at the Université de Lorraine, with varying degrees of progress having been made from one item to another.

#### 5.1.1 Status of the personnel

The French national regulatory framework (status of French research professors in the civil service) is taken into account in the processes. One of the main work projects undertaken by the Université de Lorraine after the merger was to harmonise the various personnel management systems, whatever the status (contract / civil servant). Whenever possible and financially sustainable for the institution, the most favourable rules were kept and applied to all agents. This work gave rise to the elaboration of personnel management rules (contract / civil servant, BIATSS, teachers and researchers) that explicitly present methods for recruitment and for career development, ensuring equal treatment for all agents and management rules that are widely distributed and brought to the attention of everyone in a concern for transparency.

#### 5.1.2 Equality - Diversity - Discrimination

From the beginning, the Université de Lorraine has organised and operated selection committees with special attention being paid to compliance with the principle of gender equality. The University has sought to go further in deciding to institute a non-conflict of interest commitment signed by the members of these committees.

The principles of equity, ethics and equality are supported by the policy team with the creation of the following positions: scientific integrity task manager and equality and

diversity task manager. Instituting the equality-diversity mission to fight against discrimination, notably based on gender, race or ethnic origin, religion or beliefs, disability, age or sexual orientation, has an impact on both the training and the research missions. The Université de Lorraine is one of the only Universities in France to cover all 6 of these items and not just gender equality. The University's action requires observing existing actions for promoting awareness amongst students, but also staff. This mission is backed up by a network of volunteer staff and students at the University. The actions carried out focus on the fight against discrimination and promoting equality and diversity through training actions and research projects. Prevention is handled by the DADIE group (Diversity, Anti-Discrimination, Inclusion and Equality) made up of research professors and BIATSS staff (Library, Engineers, Administration, Technicians and Health Services) along with the appointment of clearly identified discrimination agents. Lastly, the University is developing and implementing a complete help and support system for disabled staff members. With this work, the University seeks to continue and strengthen its policies in this area.

### 5.1.3 Ethics and scientific responsibility

The ethics mission is eminently cross-disciplinary, affecting human resources management as well as legal aspects and, of course, working conditions. Since 1 September 2015, the Université de Lorraine has had a scientific integrity delegation coordinated by a scientific integrity task manager. This delegation's mission is to investigate breaches of scientific integrity and to present its conclusions to the President and, where appropriate, to take the case to the disciplinary committee. This system will be rounded out by an ethics committee, an idea accepted by the policy team at the end of 2015.

For biomedical research projects, the Université de Lorraine relies on a Committee for the Protection of Persons (CPP) EST III whose favourable opinion is required before receiving authorisation from French National Agency for Medicines and Health Products Safety (ANSM). A Université de Lorraine member takes part in the CPP EST III. It should be pointed out that the CPPs also contribute to increasing awareness amongst young researchers, notably in psychology, about compliance with the ethics framework.

Lastly, the Université de Lorraine coordinates and presides over the Lorraine Animal Experimentation Ethics Committee (CELMEA – CE2A-66).

### 5.1.4 Quality of life in the workplace

The Board of Directors at the Université de Lorraine has declared the quality of life in the workplace to be a strategic orientation, and a committee was set up in January 2016 whose main objectives are preventing psychosocial risks, providing support for staff in their professional life, workplace well-being, and in-house communication and the distribution of information.

The University also keeps a watchful eye on impacts related to changes brought about by reforms that modify work practices and affect missions, especially after the merger. The creation of a system for listening and providing support was adopted in 2012. Then, in 2013, a system for reflection, analysis and consideration of psychosocial risks within the institution was set up. This system is part of the "workplace health and safety in the civil service" agreement of 2009 and the "memorandum of understanding concerning the prevention of

psychosocial risks in the civil service” of 2013. This project gave rise to a 25-member joint working group that carried out a diagnostic study of psychosocial risks, using the services of an outside service provider. It was therefore the ongoing efforts undertaken that led to the creation of the position of delegate for working conditions and relations, alongside the psychosocial risk assessment. Workplace well-being is at the heart of this new dynamic. This will be the guiding principle when implementing the plan of action that will arise from the work undertaken with the commission on quality of life in the workplace.

### **5.1.5 Scientific communication with the research community and society**

Faced with the challenges of Open Science domestically and on the European level (Horizon 2020 European Research Programme, digital law in France), the Université de Lorraine, which has signed the Berlin Declaration, recently set up an open UL institutional open archive portal, the “gateway” to the national “HAL” application.

Thanks to this open archive, the University hopes to:

- Sustainably archive its scientific production,
- Widely diffuse research results,
- Open up access to documents from research financed with public funding,
- Offer valuable services to researchers and laboratories (on-line CVs, exporting lists, etc.).

The challenge is to make it easier to gain access to the knowledge produced on the Lorraine site in all scientific fields, including in the human and social sciences, and to promote its transfer.

Since the start of 2016, texts and notices published in HAL-UL over the 2013-2017 period (the current five-year contract) are being deposited by the Department of Documentation and Publications with support from 10 Research Units. The researchers and research professors at the units are trained and encouraged to deposit their notices. It is also hoped that full-text publications can be made available.

The objective is to generalise the operation by the end of 2017. UL organised a conference with 130 participants on 27/01/2016 for an initial approach to inform research professors on the European strategies in the area.

Scientific and technical communication (CST) at the Université de Lorraine is a channel for the diffusion and transfer of results and research work, notably amongst the general public. The Université de Lorraine is one of the 8 French Universities that have set up a service in charge of promoting CST by:

- Creating and developing scientific popularisation actions (science fair, night of the researcher, Science and You, my thesis in 180’),
- Producing thematic science exhibitions,
- Participating in scientific cultural actions.

At first, the actions developed were mainly communication and diffusion actions for the general public and/or professionals. The exchanges that occur at the various events enable young researchers to get in touch with the world outside their academic environment and to envisage partnerships, including with industry. They are also a way of confirming or

modifying young researchers' career orientations from teaching toward the business world and vice-versa.

These actions have brought forward a need for training designed for researchers (beginners and experienced) to assist them in making their research accessible to the general public (popularisation). It is necessary to know how to communicate about one's project, notably for projects financed with public funds such as European or ANR projects. CST training is therefore provided in cooperation with the Doctoral Schools (for example a two-day Science and Mediation session).

Lastly, the Scientific Council strongly supports the conferences organised by the Research Units. Two campaigns provide annual support for national and international conferences, with major conferences being more particularly supported by local authorities.

### 5.1.6 Research organisation

With 61 research units and 8 federated structures, the Université de Lorraine comprises 10 Scientific Centres with a group of research organisations sharing a common strategy. The directors of the Scientific Centres, under the Vice President of the Scientific Council, are representatives of disciplines who develop shared scientific strategies quickly get organised for the incubation of multi- or inter-disciplinary scientific projects. This organisation, recognised by the site's Partner Institutions, has become a major driving force behind academic research in the Lorraine region.

The political desire for research coordination among the institutions of higher education and research in Lorraine (UL, EPST, CHRU) led to the creation in 2007 of a joint consultation and scientific outlook body, the Lorraine Strategic Orientation Committee – CCOSL, respectful of each institution's independence and respective missions, as an interface between players in public research and the local and regional authorities.

The members of the CCOSL have thus reasserted their joint strategic ambition for their priority topics of excellence:

- Convergence and complementarity amongst scientific strategies aimed at the Lorraine site's international excellence,
- Joint construction of fundamental or finalised research projects with ambitious innovation, mobilising the partners' teams in view of bringing forward new topics and contributing to regional, national and European economic growth,
- National and international appeal and visibility to attract researchers, research professors and support staff for research in all areas,
- Developing shared research infrastructures that are ambitious and visible (a resource centre, platforms, observation sites, experimental facilities, etc.),
- Support for training by and for research, notably doctorates and master's degrees,
- Developing scientific and technical culture for the general public,
- Coordinated communication for local authorities and the general public,
- Promoting and transferring research results to the regional, national and international economic fabric,

- Harmonisation and subsidiarity in research management methods, notably for the management of research contracts.

The Lorraine Strategic Orientation Committee (CCOSL) has defined eight priority orientations for the site:

- four orientations in which it seeks to reassert its leadership: Energy and Process Engineering, Materials and Processing Methods, Mathematics and Communication Sciences, Sustainable Natural Resources Management;
- two orientations requiring innovation through a multidisciplinary approach for positioning on the European level: Language and Knowledge Engineering & Engineering for Healthcare and Ageing;
- two orientations for which potential needs to be developed nationally and on the European level (including cross-border): Changes in Institutions and Organisations & Heritage, Culture and Identity.

Special framework agreements have been negotiated with CHRU and EPST in which human resources questions are notably dealt with (reception, training, data exchanges, work conditions, equipment availability, governance, IP, contracts, etc.). Supervisory committees are systematically set up.

The Université de Lorraine's Research Units have high-level scientific instruments and technical facilities whose financing, maintenance and regeneration have long benefited from concerted, coordinated contributions from the State, the Region, other local authorities and Europe (notably through the ERDF).

The 8 Ecoles Doctorales de Lorraine (Doctoral Schools of Lorraine) train 1,809 doctoral students and award 400 doctorate degrees each year. Since 2008, they have been working throughout the Lorraine region. First united under the CRED (Regional Doctoral School Committee), since 2013 they have been brought together in the Lorraine College of Doctoral Schools (CLED), which extended its make-up to students representing the different Doctoral Schools. Presided over by the Vice President of the Scientific Council and coordinated by an elected coordinator, the CLED has received the mission to propose University policies in terms of doctoral training and to supervise it, improving the visibility, appeal and cross-disciplinary position of the doctoral programmes in-house and externally and, lastly, to improve the organisation and oversight of training for doctoral students. The CLED regularly meets to work and give opinions on cross-disciplinary affairs in doctoral studies: improving the visibility, appeal and cross-disciplinary position of the doctoral programmes in-house and externally (socioeconomic world / internationally), cross-disciplinary training, contracting, financing, showcase events such as graduation ceremonies, etc. The Scientific Council or the Doctoral Schools make the final decisions. Discussions were undertaken in 2015-2016 on the interactions between the Scientific Centres and the Doctoral Schools, notably as part of the revision of the Doctoral Schools' perimeter starting in 2018.

The Scientific Centres, Research Units, federated structures, Doctoral Schools, and staff at the Research Units receive constant support from UL's operational departments, notably the Research and Valorisation Department, the Human Resources Department, the Digital Department, the Partnership Department, the Documentation and Publications Department, and the Steering and Quality Delegation. For example, support for research and the development of results, going through competitive Calls for Projects processes, support for

researchers in responding to calls for projects (projects with the French National Research Agency – ANR, European projects, etc.) is provided by UL's Operational Departments (ANR Unit, Europe Unit), and support is provided throughout the project's lifetime and not just during the preparation phase as before. There are regular interactions with the operational services at the EPSTs as part of the CCOSL's activities. A "technical CCOSL" has therefore been set up.

Furthermore, the Université de Lorraine has a Euraxess centre that has received a label from the European Commission (a Euraxess service centre in Nancy and a local Euraxess contact outlet in Metz in the interest of accessibility) and the MENESR (Ministry of National Education, Higher Education and Research), whose mission is to provide support for the Université de Lorraine's structures (training and research components) in welcoming students and researchers on the move, including at an early stage to help them to prepare their stay.

## 5.2 Gap Analysis

The gap analysis work has helped to point out the strengths and weaknesses of the Université de Lorraine, according to the 40 items of the Charter and the Code. Detailed gap analysis document is available. A summary presented is reproduced below.

CATEGORY	STRENGTHS	WEAKNESSES
<p><b>ETHICAL AND PROFESSIONAL ASPECTS</b></p> <p>(1 to 11)</p>	<ul style="list-style-type: none"> <li>- The researchers have the necessary freedom for their activities.</li> <li>- There are existing resources (e.g. officer in charge of scientific integrity) to advise researchers in the respect of ethical rules.</li> <li>- Ethical principles are increasingly present in the University's actions.</li> <li>- UL has a structured IP policy in terms of patent filing, software protection, maturation and transfer.</li> </ul>	<ul style="list-style-type: none"> <li>- Financial follow-up of research projects has to be improved.</li> <li>- The existence of mechanisms contributing to the deployment of ethical and professional principles is insufficiently known at Université de Lorraine.</li> </ul>
<p><b>RECRUITEMENT</b></p> <p>(12 to 21)</p>	<ul style="list-style-type: none"> <li>- Existing rules for recruitment of contractors within the University. This provides a framework for good practices and guarantees fair treatment and granted rights of candidates in their application.</li> <li>- Explicit procedures to strengthen the requirement of impartiality and integrity of the selection committees when recruiting faculty members</li> <li>- The recruitment of permanent staff is strongly regulated</li> </ul>	<ul style="list-style-type: none"> <li>- The qualification procedures by CNU for professor and lecturer candidates are stringent and complex, which may discourage foreign applicants.</li> <li>- The Human Resources Office is insufficiently involved in the process of recruiting faculty members, beyond the administrative procedures.</li> <li>- The principles for PhD recruitment have to be better defined</li> <li>- Low recognition of international mobility.</li> <li>- The postdoc status is not clearly explained, neither at UL nor nationally.</li> </ul>
<p><b>WORKING CONDITIONS</b></p> <p>(22 à 35)</p>	<ul style="list-style-type: none"> <li>- Good reactivity in taking into account the changes in regulations around the PhD.</li> <li>- Creation of a committee for quality of life in working place.</li> <li>- Scientific researcher status for foreign PhD students introduced at UL.</li> </ul>	<ul style="list-style-type: none"> <li>- Salary disparities for PhD students, depending on the discipline and the financing mode.</li> <li>- The work environment (including dedicated premises) varies according to the discipline in which the PhD student is enrolled.</li> <li>- The follow-up of staff, from information to taking into account individual cases, is deemed to be insufficient; the practices are not sufficiently explicit or organized.</li> <li>- Sharing of information on socio-economic partnerships has to be improved.</li> </ul>
<p><b>TRAINING</b></p> <p>(36 40)</p>	<ul style="list-style-type: none"> <li>- As UL takes into account the new decree on the doctorate, for which one of the axes is the formalization of the relationship between the supervisor and the student, this will also help to develop an individual training agreement, a charter of doctoral studies, and systematic establishment of committees for monitoring the progress of the thesis.</li> </ul>	<ul style="list-style-type: none"> <li>- Limiting funding of PhD students in humanities is an obstacle to their participation in conferences or seminars, although this should be a constitutive element of their training as research professionals (disparity from one discipline to the other).</li> <li>- The training offered to faculty members is insufficient.</li> <li>- Insufficient involvement of researchers in training.</li> </ul>

### **5.3 Action plan**

The in-house assessment brought to light various prospects for improvement at the University in terms of the points in the Charter and the Code. These are organised around the 6 orientations discussed above (cf. 4.3) and are summarised in the following table. For these 6 orientations, avenues for improvement have been laid down in actions to be implemented to achieve short, medium and long-term objectives. The levels of priority for the actions to be carried out were defined by the project's target public – young and experienced researchers – through a survey carried out as indicated above. Additional actions have also been identified, contributing to the plan of action.

N°	ACTION	Leader	Operational manager	Deliverable	Indicators	Starting date	Deadline
<b>0</b>	<b>HRS4R LABEL</b>						
<b>0.1</b>	Inform the governing bodies						
<b>0.2</b>	Perform the Gap Analysis						
<b>0.3</b>	Set up the plan of action and HR strategy						
<b>0.4</b>	Approve the plan of action and the HR strategy						
<b>0.5</b>	Deposit the case file and request recognition						
<b>0.6</b>	Deploy and monitor the plan of action						
<b>0.7</b>	Project followup						
<b>I</b>	<b>STATUS OF DOCTORAL AND POST-DOCTORAL STUDENTS</b>						
<b>1.1</b>	Provide support for doctoral students and post-docs with respect to their career projects						
<b>1.2</b>	Define a guide to good recruitment practices for doctoral students and post-docs						
<b>1.3</b>	Train thesis supervisors						
<b>II</b>	<b>RESEARCHER RECRUITMENT AND CAREERS</b>						
<b>2.1</b>	Organise and implement support for new recruits						
<b>2.2</b>	Set up monitoring for career development in terms of activities and their professional trajectory						
<b>III</b>	<b>QUALITY OF LIFE IN THE WORKPLACE</b>						
<b>3.1</b>	Improve quality of life at the workplace						
<b>3.2</b>	Develop actions for promoting equality and diversity at the Université de Lorraine, reinforce the tools for fighting						

N°	ACTION	Leader	Operational manager	Deliverable	Indicators	Starting date	Deadline
	against discrimination						
3.3	Improve the conditions of professional life for disabled persons						
<b>IV</b>	<b>MOBILITY: PROVIDE THE UNIVERSITY WITH AN INTERNATIONAL DIMENSION</b>						
4.1	Stimulate international mobility for beginning and experienced research staff						
4.2	Based on our Euraxess system, and working with the EPSTs, develop a reception and support service for all incoming researchers in terms of logistics and administration						
<b>V</b>	<b>PROFESSIONAL ETHICS, INTEGRITY AND VALUES</b>						
5.1	Develop a culture of project support, and deposit files upon completion						
5.2	Reinforce awareness on responsibility and scientific integrity amongst beginner and experienced researchers						
5.3	Implement a scientific integrity charter and define how it is to be applied at the Université de Lorraine						
<b>VI</b>	<b>ACCESS AND DIFFUSION OF KNOWLEDGE</b>						
6.1	Protect and promote scientific assets by making deposits in the institutional archive (HAL)						
6.2	Encourage and promote diffusion of research results in the socioeconomic world						

## 5.4 Implementation of the strategy

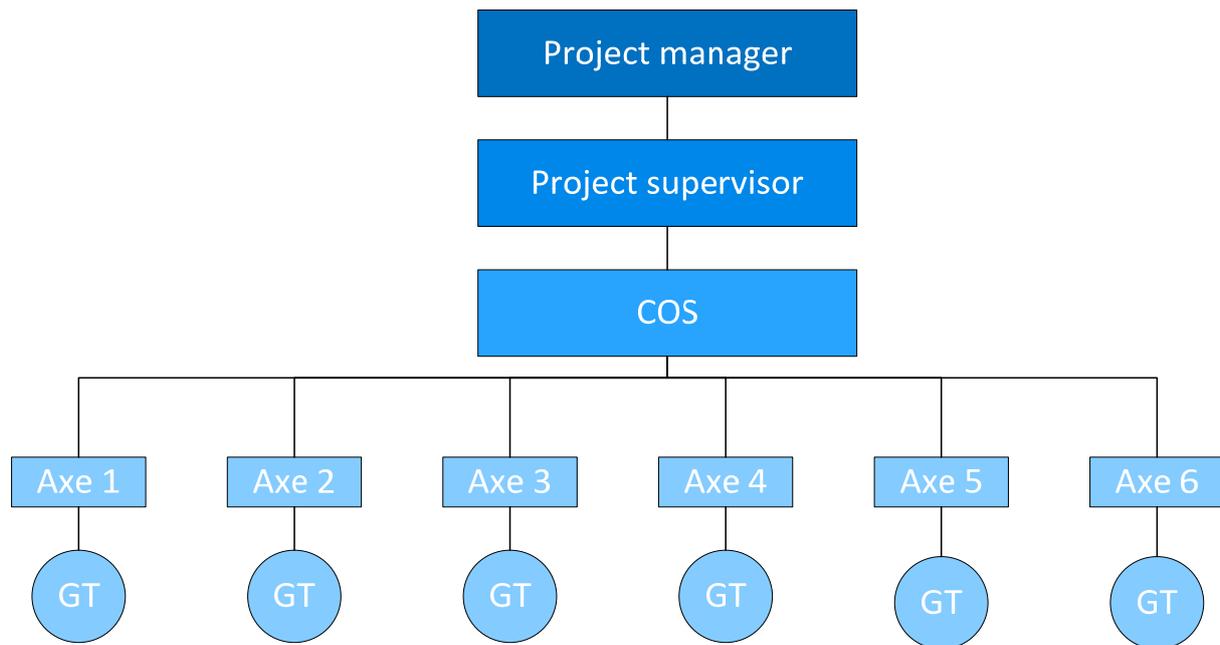
Upon presentation of the summary review document and the plan of action, the Université de Lorraine's governing body approved the system described here and validated it in a decision by the Board of Directors on 08/11/2016. The present document and the plan of action have been published on the official website.

This strategy will be implemented by the University's Board of Directors (Governing Board). For this, it will appoint a Project Manager – the VP for Human Resources – a Project Supervisor in charge of the operational followup and of monitoring the indicators, and a Strategic Orientation Committee (COS) adding to the former steering committee, set up for the HRS4R labelling project, a doctoral college coordinator, representatives of the faculty members, of doctoral students and of post-docs. This Strategic Orientation Committee will meet at least three times a year, using indicators to monitor the progress made on the plan of action, and will define the priority orientations for pursuit of the work. Working groups (GT), at least 1 per orientation in the plan of action, will be set up by the COS and their make-up will be determined in relation to the orientation's topics, with representatives of the stakeholders. Each working group will be led by a member of the COS. Depending on the ongoing actions, the working groups may invite experts to contribute to their work.

Progress on the work will be presented annually to the UL Governing Board.

Internal follow-up and external evaluation will be formalized within the framework of the Quality process of the university, notably in continuity and complementarity of the work done for the evaluation of UL by HCERES. The definition of global advancement indicators for the project and for each action, aims at efficiency in this follow-up. Each working group will be able to review and complete the proposed indicators, taking into account the progress of the project. A synoptic presentation of the advancement will be produced after each COS meeting, and will be presented by the project leader to the executive committee of the university.

These reports and the follow-up of the indicators will be the basis for the self-assessment two years after the beginning of the plan of action. The advancement will be described in a self-assessment report. Another self-assessment report will be produced at the end of a 4-years period; it will make explicit the progress made by the university with respect to the initial goals and to the state of the university, and will focus on the advancement of the initial plan of action. This report will be submitted to external reviewing.



## 6 CONCLUSION

The Université de Lorraine seeks to position itself as an attractive Research University that is open to the entire world. Application of the principles laid down in the European Charter is quite naturally an objective for the institution. In time, these principles should be extended not only to research professions, but to all of UL's missions, i.e. research and training and all administrative functions providing support for these missions.

The Université de Lorraine is thus engaged in applying the 40 principles in the Charter and is preparing to be able to comply with this Code through a quality approach designed for this purpose.

## 7 ANNEX / RESULT OF THE SURVEY

chosen priority	Action	AXE 1 : STATUS OF DOCTORAL AND POST-DOCTORAL STUDENTS		
		Rank 1	Rank 2	Rank 3
3	Action 1 : Draw up a map of doctoral and post-doctoral student statuses.	43	93	137
1	Action 2 : Provide support for doctoral and post-doctoral students in view of their career projects.	138	71	63
2	Action 3 : Define a guide to good recruitment practices for doctoral and post-doctoral students.	93	107	71
	NR	2	5	5

chosen priority	Action	AXE 2 : ETHICS, INTEGRITY AND PROFESSIONAL VALUES			
		Rank 1	Rank 2	Rank 3	Rank 4
3	Action 1 : Set up a charter of scientific integrity and decline these implementing rules to the University of Lorraine.	73	61	79	56
2	Action 2 : Organize training seminars for students and faculty members on default of scientific integrity.	57	85	74	52
1	Action 3 : Develop a culture of coaching project, from the beginning to the outcome project.	100	60	56	52
4	Action 4 : Develop reporting mechanisms on projects regardless of funding source.	41	62	57	106
	NR	5	8	10	10

chosen priority	Actions	AXE 3 : RECRUITMENT, TRANSPARENCY AND CONFLICT OF INTEREST	
		Rank 1	Rank 2
1	Action 1 : Organize and implement support for new recruits.	155	117
2	Action 2 : Make the particular career monitoring during the training year, in terms of activities and professional trajectory.	118	153
	NR	3	6

chosen priority	Actions	AXE 4 : ACCESS AND DISSEMINATION OF KNOWLEDGE	
		Rank 1	Rank 2
2	Action 1 : Encourage and promote the dissemination of research results to the socio-economic world.	127	145
1	Action 2 : Protecting and enhancing scientific heritage through the deposit in the institutional archives (HAL).	147	126
	NR	2	5

chosen priority	Actions	AXE 5 : MOBILITY: GIVE AN INTERNATIONAL DIMENSION TO THE UNIVERSITY	
		Rank 1	Rank 2
1	Action 1 : Stimulate international mobility for beginning and experienced research staff	144	128
2	Action 2 : Building with EPST a welcome service to support all researchers in logistical and administrative tasks.	129	141
	NR	3	7

chosen priority	Actions	AXE 6 : DISCRIMINATION / EQUALITY: IMPROVE WORKING CONDITIONS				
		Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
4	Action 1 : Reinforce and deploy the masterplan for Disabilities at UL.	27	39	52	86	62
3	Action 2 : Promote professional life of people with disabilities.	63	58	64	54	29
1	Action 3 : Developing actions for the promotion of equality and diversity at the Université de Lorraine	66	63	55	49	35
2	Action 4 : Develop tools to fight against discrimination.	64	67	63	38	35
5	Action 5 : Develop the Charter of mails for a sensible use of digital tools.	51	41	33	39	105
	NR	5	8	9	10	10

chosen priority	Actions	AXE 7 : INFORMATION / TRAINING		
		Rank 1	Rank 2	Rank 3
2	Action 1 : Developing the vademecum on the different statuses of UL personnel.	49	123	95
1	Action 2 : Streamline and simplify access to information.	161	62	47
3	Action 3 : Encourage researchers to follow the training offered to them.	60	82	124
	NR	6	9	10

## 8 GLOSSARY

- Université de Lorraine (UL)
- Conseil national des universités (CNU): French National Council of Universities – in French public Higher Education, CNU, whose members are either elected or nominated by the ministry of higher education and research, is responsible for qualifying scientists for lecturer or professor positions, thus giving them the right to apply for positions posted at universities. CNU also distributes a quota of promotions, the rest being handed out by the universities. CNU comprises 57 sections covering the different scientific disciplines.
- Agence Nationale de la Recherche (ANR): A public body under the authority of the Ministry of research, ANR provides funding for project-based research in all fields of science – for both basic and applied research - to public research organizations and universities, as well as to private companies (including SMEs).
- Le Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur (HCERES): The High Council for Evaluation of Research and Higher Education is an independent administrative authority, responsible for evaluating higher education institutions and groupings, research bodies, scientific cooperation foundations and the French National Research Agency, or, where applicable, overseeing the quality of evaluations carried out by other bodies. It also evaluates research units on request from the overseeing institution.
- Comité de sélection: for each lecturer or professor position at the university, a recruitment committee is set up, which is called comité de selection (selection committee) and whose working is organized by French decree n° 84-431 (6 June 1984).
- PEDR (prime d'encadrement doctoral et de recherche): a supplementary part of salary assigned to lecturers and professors who are deemed to be especially active in research.
- Sciences Humaines et Sociales (SHS): Humanities and Social Sciences.
- Comité de protection des personnes (CPP): literally “committee for protection of persons” – Committee responsible for validating and authorizing research which implies human persons as research subjects.
- Ecole Doctorale (ED): Doctoral School.
- Direction de la Recherche de la Valorisation (DRV): Université de Lorraine’s central office for research, valorization, and doctoral studies.
- Société d'Accélération de Transfert de Technologie (SATT): Tech transfer accelerator companies, which fund the maturation of tech transfer projects.
- Incubateur Lorrain: Incubator for startups stemming from tech transfer of our research; jointly founded by Université de Lorraine, the national research organizations present in the region, and the University Hospital.
- Direction des ressources humaines (DRH): Université de Lorraine’s central office for human resources.
- Direction des Relations Internationales et Européennes (DRIE): Université de Lorraine’s office for international and European affairs.
- Direction de la Formation et de l'Orientation et Insertion Professionnelle (DFOIP) : Université de Lorraine’s central office for education and professional integration.
- Délégation d'Aide au Pilotage et à la Qualité (DAPEQ): Université de Lorraine’s central office for quality control
- Chargé de mission: Task officer – University staff members who is assigned a specific mission or task, on behalf of the university leadership

- Habilitation à Diriger la Recherche (HDR): highest French academic degree, the habilitation to lead research is the prerequisite for applying for a full professor position and for being main supervisor of PhD theses.
- Conseil Scientifique (CS): Scientific council of the university.
- Conseil scientifique restreint (CSR): The restricted scientific council, a subset of the scientific council (restricted to faculty members), processes individual cases (promotions, etc.).
- Conseil d'administration (CA): Governing Board of the university.
- Conseil d'administration restreint (CAR): The restricted governing board, a subset of the governing board (restricted to faculty members), processes individual cases
- Conseil de la formation (CF): Education council of the university.
- Conseil de la Vie Universitaire (CVU): Student life council of the university.
- Pôles scientifiques: scientific departments – the university organizes its research in research labs which are grouped into 10 scientific departments, each having its own council and an elected director.
- Comité Technique (CT): technical committee – a body where representatives of the university employees can express their opinion about all issues related to the university's human resources policy.
- Comité d'hygiène, sécurité et conditions de travail (CHSCT): Health and Safety Committee.
- Etablissement public à caractère scientifique et technologique (EPST): National Research Organizations (NROs) in the French academic system. Some of their research activities are conducted on their own, other are done within joint labs with universities (UMR = Unités Mixtes de Recherche). They are therefore close partners with the universities.
- Centre national de la recherche scientifique (CNRS): France's major NRO, the largest fundamental research organization in Europe, carrying out research in all fields of knowledge.
- Institut national de recherche agronomique (INRA): a NRO, Europe's top agricultural research institute and the world's number two center for the agricultural sciences.
- Institut national de la santé et de la recherche médicale (INSERM): a NRO entirely focused on human health.
- Institut national de recherche en informatique et en automatique (INRIA): a NRO, the French National Institute for computer science and applied mathematics.
- Comité d'Orientation Scientifique Lorrain (CCOSL): Université de Lorraine, the NROs present in Lorraine (CNRS, Inra, Inria, Inserm) and the University Hospital (CHRU) use a light and efficient way of coordinating their scientific policy in the region: the CCOSL (Coordination and Scientific Orientation Committee in Lorraine).